

CLAIMS

WHAT IS CLAIMED IS:

1. An adhesive composition comprising: the combination produced by combining effective amounts and proportions of an oil component; a hydrocarbon resin component; a fugitive alkali agent component; a fugitive anti-oxidant component; and a cross linking agent component, to provide an adhesive that can be applied to a substrate and which will cure on the substrate.
2. The adhesive composition of claim 1, wherein the resin component comprises a C-5 hydrocarbon component and a C-9 hydrocarbon component.
3. The adhesive composition of claim 1, wherein the hydrocarbon resin component comprises a hydrocarbon resin having a softening point from about 70°C to 140°C.
4. The adhesive composition of claim 1, wherein the oil component comprises at least one member selected from the group consisting of linseed oil, tung oil and sunflower oil.
5. The adhesive composition of claim 1, wherein the oil component comprises at least one member selected from the group consisting of cashew shell oil, castor oil, coconut oil, cotton seed oil, fish oil, oiticica oil, rapeseed oil, safflower oil, sesame oil, soybean oil, walnut oil, tall oil, and fatty acids.
6. The adhesive composition of claim 2, wherein the C-5 hydrocarbon has a softening point from between 75°C to 115°C.
7. The adhesive composition of claim 2, wherein the C-5 hydrocarbon is selected from the group consisting of cis 1,3 pentadiene, trans 1,3 pentadiene, and 2- methyl 2 butene.

8. The adhesive composition of claim 2, wherein the C-9 hydrocarbon has a softening point from between 100°C to 140°C.
9. The adhesive composition of claim 2, wherein the C-9 hydrocarbon is selected from the group consisting of styrene, vinyl toluene, indene, methyl indene, and alpha methyl styrene.
10. The adhesive composition of claim 1, wherein the fugitive alkali agent comprises a member selected from the group consisting of ammonia, monoethanol amine, and triethanol amine.
11. The adhesive composition of claim 1, wherein the fugitive anti-oxidant component comprises an oxime.
12. The adhesive composition of claim 1, wherein the cross linking agent component comprises latex polymer emulsions.
13. The adhesive composition of claim 1, and comprising a metal naphthanate.
14. The adhesive of claim 1, and comprising a polymer emulsion component with carboxyl functionality.
15. The adhesive of claim 14, wherein the polymer emulsion component comprises acrylic, styrene, butadiene, EVA and/or VAE materials.
16. The adhesive of claim 13, wherein the metal is selected from the group consisting of cobalt, calcium zirconium and manganese.
17. The adhesive of claim 1, comprising an effective amount of electro-conductive material to render the cured adhesive electrically conductive.
18. The adhesive of claim 1, wherein the adhesive is formulated to substantially lack VOCs that are emitted during curing.

19. The adhesive of claim 1, wherein the oil component makes up about 1-20% of the composition.

20. The adhesive of claim 1, wherein the hydrocarbon resin component comprises resins with 6 or fewer carbon atoms, at a ratio to the oil component of about 2:1 to 1:2.

21. The adhesive of claim 1, wherein the adhesive has a formulation to cure to have a shear strength of over 5 psi after 15 minutes.

22. The adhesive of claim 1, wherein the adhesive has a formulation to cure to have a shear strength of over 200 psi after 3 months.

23. The adhesive of claim 1, wherein the adhesive has a formulation to exhibit an open time of up to 60 minutes.

24. The adhesive of claim 1, wherein the cross-linking agent comprises a pendant oxazoline group component.

25. The adhesive of claim 1, wherein the oil component is a drying oil.